

Title (en)

Pivoting ring seal

Title (de)

Schwenkbare Ringdichtung

Title (fr)

Joint d'étanchéité à bague de pivotement

Publication

EP 2805740 B1 20170607 (EN)

Application

EP 14178424 A 20120414

Priority

- US 201161475822 P 20110415
- US 201213446915 A 20120413
- EP 12718506 A 20120414

Abstract (en)

[origin: WO2012142540A1] The instant invention provides for a pivoting ring that can be used as a seal for an inflatable member. The pivoting ring seal offers a mechanical action which acts to tighten with increasing inflation and/or expansion of an inflatable member. As the inflatable member increases in pressure and/or size, one side of the ring is lifted and pivots around a fulcrum in the middle of the ring seal causing the opposite side of the ring seal to decrease in diameter. The pivot ring causes the opposite part of the seal to tighten about an inner member allowing for a higher-pressure seal. In addition to a higher pressure seal, the working length of the inflatable member can be adjusted by moving the ring along the length of the inflatable member.

IPC 8 full level

A61F 2/82 (2013.01); **A61F 2/958** (2013.01); **A61M 25/10** (2013.01)

CPC (source: EP KR US)

A61F 2/958 (2013.01 - KR US); **A61M 25/10** (2013.01 - EP KR US); **A61M 25/1018** (2013.01 - KR US); **A61M 25/104** (2013.01 - KR);
A61M 29/02 (2013.01 - KR); **A61F 2/82** (2013.01 - US); **A61F 2210/0014** (2013.01 - KR); **A61F 2210/0061** (2013.01 - EP KR US);
A61F 2250/0067 (2013.01 - EP KR US); **A61F 2250/0069** (2013.01 - EP KR US); **A61M 2025/1068** (2013.01 - EP KR US);
A61M 2025/1084 (2013.01 - EP KR US); **A61M 2205/0216** (2013.01 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012142540 A1 20121018; AU 2012242534 A1 20131003; AU 2012242534 B2 20150827; AU 2015210398 A1 20150903;
AU 2015210398 B2 20170713; BR 112013026419 A2 20201103; CA 2830385 A1 20121018; CA 2830385 C 20170711;
CN 103596617 A 20140219; CN 103596617 B 20161214; EP 2696931 A1 20140219; EP 2696931 B1 20150603; EP 2805740 A1 20141126;
EP 2805740 B1 20170607; EP 2805741 A1 20141126; EP 2805741 B1 20190605; ES 2543891 T3 20150825; ES 2639725 T3 20171030;
ES 2743929 T3 20200221; HK 1188578 A1 20140509; HK 1204457 A1 20151120; HK 1204458 A1 20151120; JP 2014514095 A 20140619;
JP 2018057896 A 20180412; JP 6254520 B2 20171227; JP 6737766 B2 20200812; KR 102029459 B1 20191008; KR 102157454 B1 20200918;
KR 20140023976 A 20140227; KR 20190115479 A 20191011; RU 2013150759 A 20150520; US 2012277718 A1 20121101;
US 2015216693 A1 20150806; US 9028444 B2 20150512; US 9757261 B2 20170912

DOCDB simple family (application)

US 2012033696 W 20120414; AU 2012242534 A 20120414; AU 2015210398 A 20150806; BR 112013026419 A 20120414;
CA 2830385 A 20120414; CN 201280028254 A 20120414; EP 12718506 A 20120414; EP 14178424 A 20120414; EP 14178426 A 20120414;
ES 12718506 T 20120414; ES 14178424 T 20120414; ES 14178426 T 20120414; HK 14101619 A 20140220; HK 15104488 A 20150512;
HK 15104489 A 20150512; JP 2014505389 A 20120414; JP 2017230468 A 20171130; KR 20137029968 A 20120414;
KR 20197028784 A 20120414; RU 2013150759 A 20120414; US 201213446915 A 20120413; US 201514686347 A 20150414